

Tuesday, August 29, 2017 3:04:03 PM

Page 1

Accept

Setup Start *NS1*

Stop *NS2*

*** 1 ***

Cust Item ID:

Start Date: 9/12/2017 **Start Qty:** 1.00

*** 1 ***

Customer:

Required Date: 9/14/2017 **Req'd Qty:** 1.00

Reference:

Approvals: Process Plan:  DAS 21 Date: AUG 30 2017

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D4038	E

100	Pick Kit	0.00
-----	----------	------

100

SEP 13 2017

Packaging	Memo	0.16
-----------	------	------

Packaging P O O

110	0.00
-----	------

110

SEP 14 2017

Small Fab	Memo	0.33
-----------	------	------

Small Fab Assemble as per dwg

120	QC5- Inspect part completeness to step on W/O	0.00
-----	---	------

120

SEP 14 2017

QC	Memo	0.02
----	------	------

Quality Control

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Work Order ID 165805

Tuesday, August 29, 2017 3:04:03 PM

165805

Page 2

Item ID: D4038-042 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Angle Assembly Fwd RH
Start Date: 9/12/2017 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 9/14/2017 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
121 *121* Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum Memo ***MASK INTERIOR OF BLOCKS AND MASK ALL HOLES WITHOUT BOLTS*** START TIME: 1:10 OVEN TEMPERATURE: 300° FINISH TIME: 1:40	0.00 0.39							1 ϕ 19-09-18: 9-89
122 *122* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.02							1 ϕ SEP 20 2017 DAS 9 9-89
130 *130* Packaging Packaging	Identify as per dwg & Stock Location: J500 Memo	0.00 0.01							1 DAS 6 9-89 SEP 20 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
				Completed By					
				Lead hand / Supervisor Approval Verification					
				QC / QA Coordinator Approval					

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						

Work Order ID 165805

Tuesday, August 29, 2017 3:04:03 PM

165805

Page 3

Item ID: D4038-042**Accept*****N900040100*****Setup Start*****NS1*****Revision ID:****Stop *NS2*****Item Name:** Angle Assembly Fwd RH**Start Date:** 9/12/2017 **Start Qty:** 1.00***1*****Cust Item ID:****Required Date:** 9/14/2017 **Req'd Qty:** 1.00***1*****Customer:****Reference:****Approvals:****Process Plan:** _____**Date:** _____**Tooling:** _____**Date:** _____**Run Start*****NR1*****QC:** _____**Date:** _____**SPC (Y/N):** _____**Date:** _____**Stop*****NR2*****Sequence ID/
Work Center ID****Operation
Description****Set Up/
Run Hours****Tool ID****Tool #****Plan
Code****Accept
Qty****Reject
Qty****Reject
Number****Insp.
Stamp**

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.10

Quality Control

W 17/9/20

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																																													
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval																																																																											
Description Work Order Deviation			Disposition																																																																												
			Completed By																																																																												
			Lead hand / Supervisor Approval Verification																																																																												
			QC / QA Coordinator Approval																																																																												
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3" style="text-align: left;">Root Cause</th> <th colspan="3" style="text-align: left;">FAULT CATEGORY</th> </tr> </thead> <tbody> <tr> <td style="width: 15%;">Environment ☐</td> <td style="width: 15%;">No Re-verification ☐</td> <td style="width: 15%;">Pressure/Forced ☐</td> <td style="width: 15%;">Temperature/Cure ☐</td> <td style="width: 15%;">Power Loss/Surge ☐</td> <td style="width: 15%;">Positioned Wrong ☐</td> </tr> <tr> <td>Design ☐</td> <td>Operator ☐</td> <td>Bending ☐</td> <td>Set-up ☐</td> <td>Folio/Program ☐</td> <td>Outside Dimensions ☐</td> </tr> <tr> <td>Doc/Data ☐</td> <td>Offset/Setup ☐</td> <td>Centre Not Concentric ☐</td> <td>BOM/Route ☐</td> <td>Grain ☐</td> <td>Over/Under tolerance ☐</td> </tr> <tr> <td>Equip/Tooling ☐</td> <td>Supplier ☐</td> <td>Cracks ☐</td> <td>Broken/Damage/Defect ☐</td> <td>Weld ☐</td> <td>Part Incorrect ☐</td> </tr> <tr> <td>Handling/Pre ☐</td> <td>Training ☐</td> <td>Crimp/Kink/Ripple/Wave ☐</td> <td>Inspection Incomplete/Unqualified ☐</td> <td>Wrong Stock Pulled ☐</td> <td>Part Lost/Missing ☐</td> </tr> <tr> <td>Material ☐</td> <td>Use for Testing ☐</td> <td>Cuffs ☐</td> <td>Contamination ☐</td> <td>Out of Sequence ☐</td> <td>Part Moved ☐</td> </tr> <tr> <td>Internal Transport ☐</td> <td>Poor Information ☐</td> <td>Crushing ☐</td> <td>Countersink ☐</td> <td>Off-set ☐</td> <td>Drawing ☐</td> </tr> <tr> <td>Tribal Knowledge ☐</td> <td>Rushing ☐</td> <td>Heat Treat ☐</td> <td>Cut Too Short ☐</td> <td>Mislabeled ☐</td> <td>Finish ☐</td> </tr> <tr> <td>LOA ☐</td> <td>Product Improvement ☐</td> <td>Wave/Twist in Tube ☐</td> <td>Instructions Incomplete/Unclear ☐</td> <td>Fit/Function ☐</td> <td>Misread ☐</td> </tr> <tr> <td>Substation ☐</td> <td>Process Improvement ☐</td> <td>Marks/Chatter ☐</td> <td>Drill Holes ☐</td> <td>Misaligned/off center ☐</td> <td>Turning Sequence ☐</td> </tr> <tr> <td>Past Expiry Date ☐</td> <td>Manufacturing Process ☐</td> <td colspan="4" rowspan="2" style="vertical-align: top;">OTHER : _____</td> </tr> <tr> <td>Misidentified ☐</td> <td>Past Due ☐</td> </tr> </tbody> </table>						Root Cause			FAULT CATEGORY			Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____				Misidentified ☐	Past Due ☐
Root Cause			FAULT CATEGORY																																																																												
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																																																																										
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐																																																																										
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐																																																																										
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐																																																																										
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐																																																																										
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐																																																																										
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐																																																																										
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐																																																																										
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐																																																																										
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐																																																																										
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____																																																																													
Misidentified ☐	Past Due ☐																																																																														

Picklist Print

Tuesday, August 29, 2017 3:04:03 PM

Page 1

Work Order ID: 165805

165805

Parent Item: D4038-042

D4038-042

Parent Item Name: Angle Assembly Fwd RH

Start Date: 9/12/2017

Required Date: 9/14/2017

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A NEW ISSUE 10-04-21 JLM VERIFIED BY:EC IPP
Rev:B 11.01.31 as per dwg rev.c DD verified by:ec

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4038-2 *D4038-2* Angle, Fwd, RH		Manufactured	No			100	Each	0.0000	1	1	DAS 6 39		
D4038-6 *D4038-6* Block		Manufactured	No			100	Each	1.0000	1	1	DAS 6 39		
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST070				1					
				156937				1					
D4038-10 *D4038-10* Block		Manufactured	No			100	Each	1.0000	1	1	DAS 6 39		
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST070				1					
				157106				1					
AN3-14A *AN3-14A* Bolt		Purchased	No			100	Each	216.0000	2	2	DAS 6 39		
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				over003				200					
				m138040				200					
				ST349				16					
				m137075				16					

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

Tuesday, August 29, 2017 3:04:03 PM

Page 2

Work Order ID: 165805

165805

Parent Item: D4038-042

D4038-042

Parent Item Name: Angle Assembly Fwd RH

Start Date: 9/12/2017

Required Date: 9/14/2017

Start Qty: 1.00

Required Qty: 1.00

MS21042L3

Purchased

No

100

Each

1,420.000

2

2

MS21042L3

**

Nut

Location

Loc Qty

Loc Code

FP001

72

m135945

72

GA

336

m134360

102

M136665

234

ST303

1012

M126333

16

m138084

14

m138230

500

m138326

482

SEP 13 2017

DAS
6
9-89

2

NAS1149D0363J

Purchased

No

100

Each

1,423.000

4

4

NAS1149D0363J

**

Washer

Location

Loc Qty

Loc Code

GA

408

m137963

408

ST263

1015

126319

16

m138336

999

SEP 13 2017

DAS
6
9-89

4

DQA: _____ Date: _____



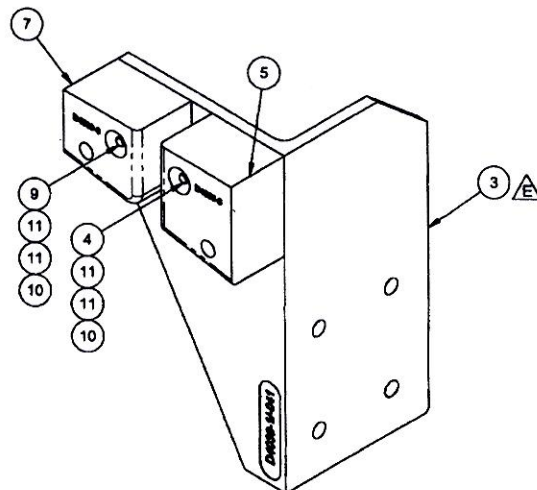
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

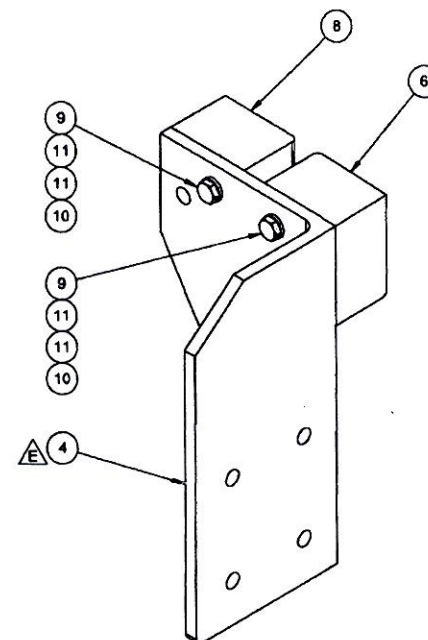
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step # : _____		QTY Effective : _____			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

ITEM NO.	QTY. -041	QTY. -042	PART NUMBER	DESCRIPTION
1	X		D4038-041	ANGLE ASSEMBLY, FWD, LH
2		X	D4038-042	ANGLE ASSEMBLY, FWD, RH
3	1		D4038-1	ANGLE, FWD, LH
4		1	D4038-2	ANGLE, FWD, RH
5	1		D4038-5	BLOCK
6		1	D4038-6	BLOCK
7	1		D4038-9	BLOCK
8		1	D4038-10	BLOCK
9	2	2	AN3-14A	BOLT
10	2	2	MS21042L3	NUT
11	4	4	NAS1149D0363J	WASHER (AN960JD10)



D4038-041 ANGLE ASSEMBLY, FWD, LH



D4038-042 ANGLE ASSEMBLY, FWD, RH

NOTES:

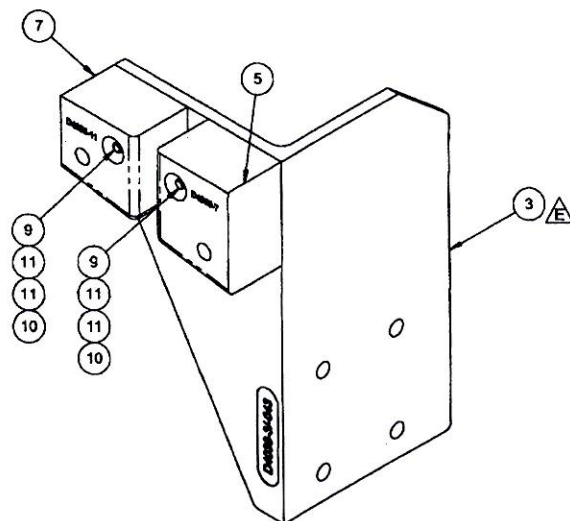
- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: -041 - 1.75 lbs
-042 - 1.74 lbs

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 165805
AUG 30 2017

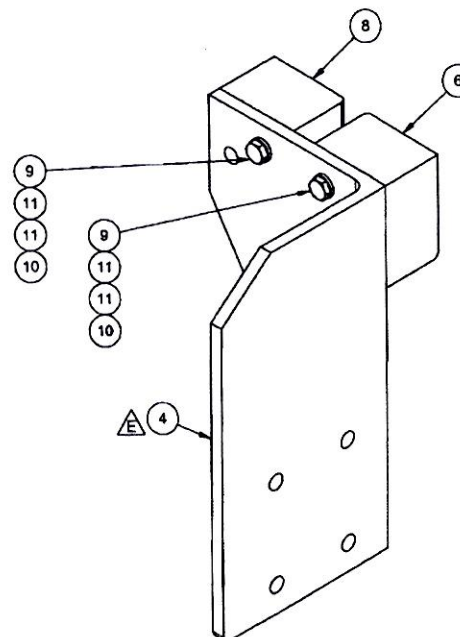
E	1.19 X 1.00 CHAMFER WAS R1.00. REF: NCR11-543.	MB	11.04.11
D	REVISED D4038-7/8-11/12 AS FOLLOWS: 1.87 WAS 1.73 (C7-9); 2.14 WAS 2.00 (C4-9); 2.13 WAS 2.00 (C7-10); 1.86 WAS 1.73 (C4-10); 1.52 WAS 1.38 (C7-13); 1.79 WAS 1.65 (C4-13); 1.77 WAS 1.65 (C7-14); 1.49 WAS 1.38 (C4-14). REASON: NCR11-458.	MB	11.03.03
C	REVISED D4038-3/4 AS FOLLOWS: 0.569 WAS 0.714 (B2-5, B4-6); D4038-043/044 ARE AFFECTED. REASON: NCR11-389.	MB	11.01.20
B	REVISED DIMENSIONS ALL SHEETS, ADD Ø0.316 HOLES IN -1/2-3/4 PARTS, ADD RADIUS TO -1/2-3/4 PARTS.	HS	10.01.05
A	NEW ISSUE	HS	09.12.14
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D4038	SHEET 1 OF 14
APPROVED		TITLE	SCALE
DE APPR.		BRACKET	NTS
DATE	11.04.11	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR REPRODUCED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

RELEASED
2011-04-21
JMB

ITEM NO.	QTY. -043	QTY. -044	PART NUMBER	DESCRIPTION
1	X		D4038-043	ANGLE ASSEMBLY, AFT, LH
2		X	D4038-044	ANGLE ASSEMBLY, AFT, RH
3	1		D4038-3	ANGLE, AFT, LH
4		1	D4038-4	ANGLE, AFT, RH
5	1		D4038-7	BLOCK
6		1	D4038-8	BLOCK
7	1		D4038-11	BLOCK
8		1	D4038-12	BLOCK
9	2	2	AN3-14A	BOLT
10	2	2	MS21042L3	NUT
11	4	4	NAS1149D0363J	WASHER (AN960JD10)



D4038-043 ANGLE ASSEMBLY, AFT, LH



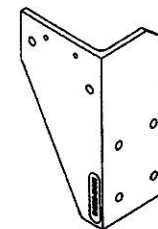
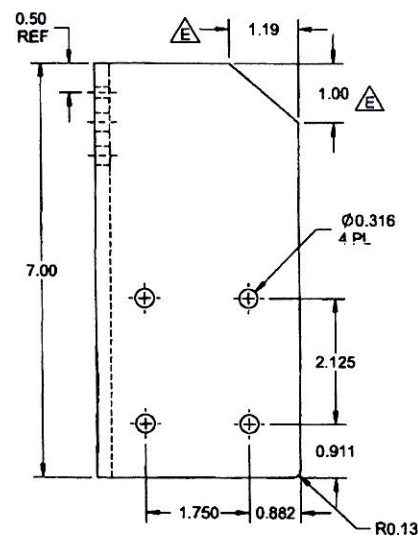
D4038-044 ANGLE ASSEMBLY, AFT, RH

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: -043 - 1.96 lbs
-044 - 1.74 lbs

RELEASED
2011-04-21

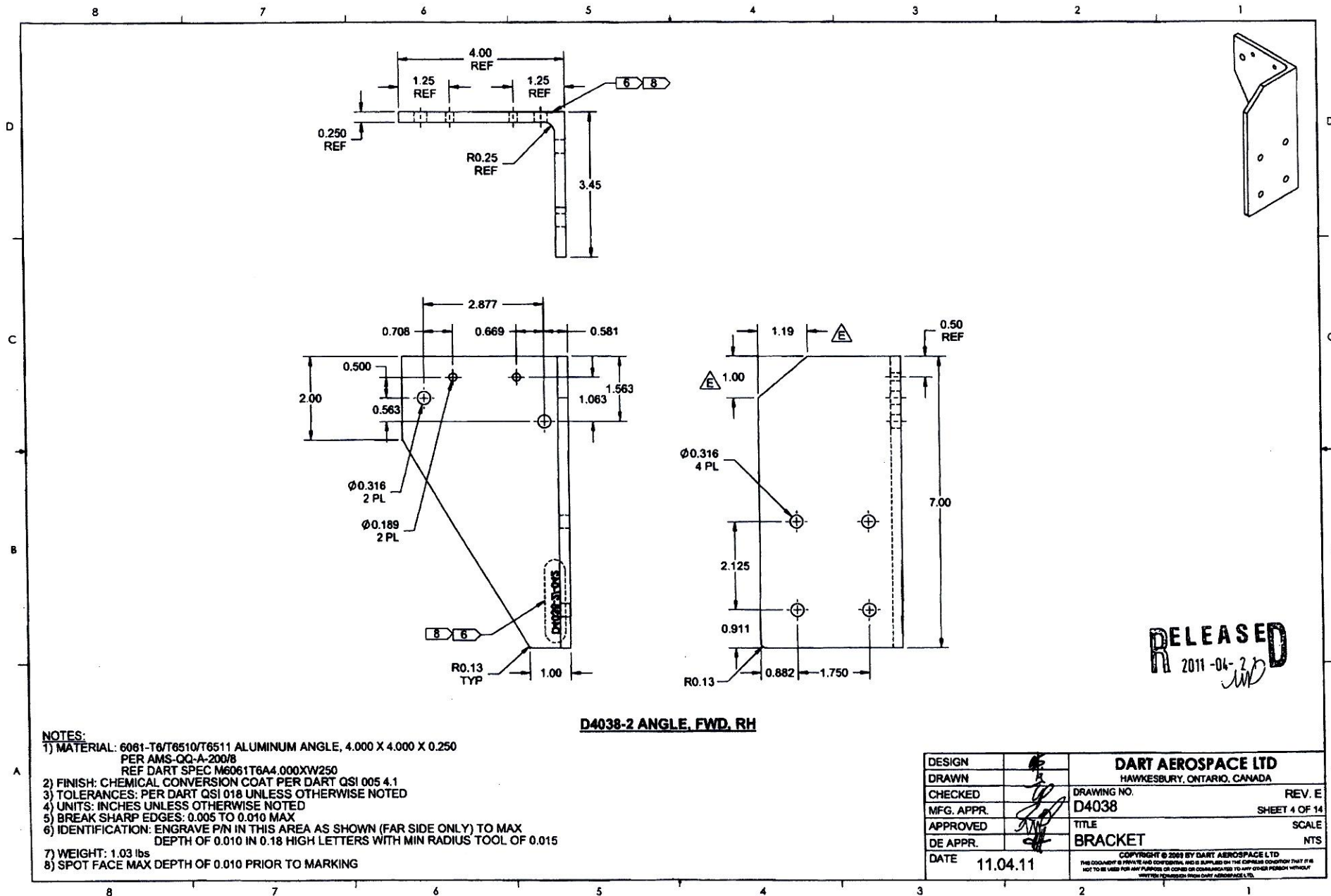
DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. D4038	REV. E
MFG. APPR.			SHEET 2 OF 14
APPROVED		TITLE BRACKET	SCALE
DE APPR.			NTS
DATE	11.04.11	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRELIMINARY AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

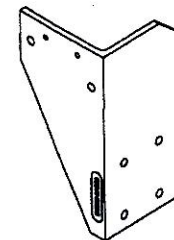
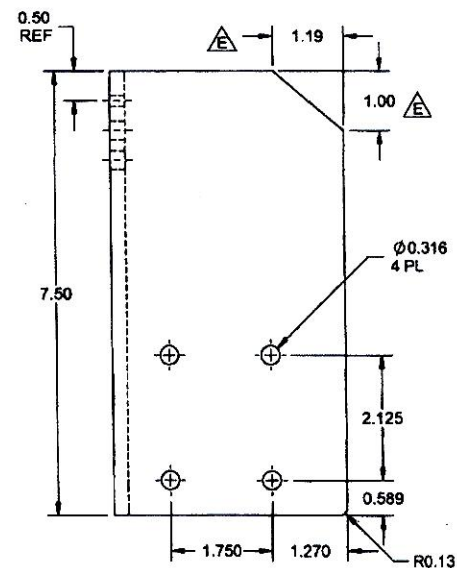
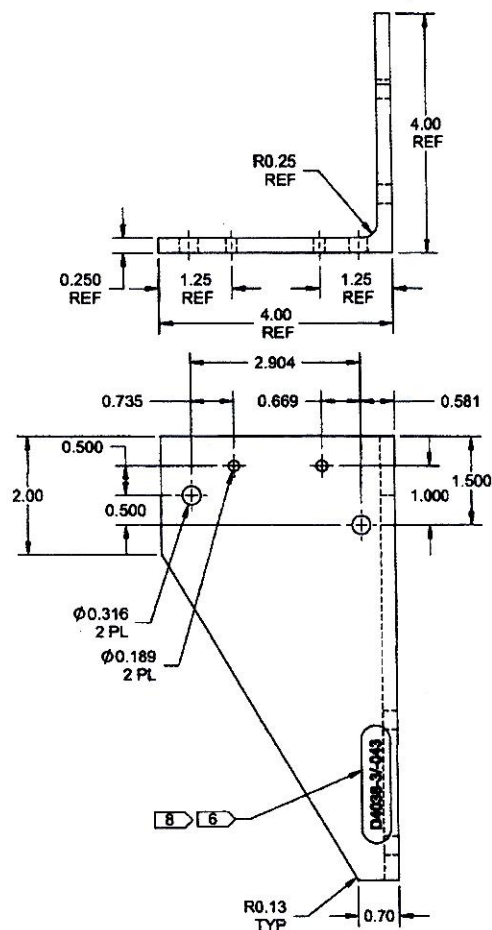


RELEASE
2011-04-21

- 1) MATERIAL: 6061-T6/T6510/T6511 ALUMINUM ANGLE, 4.000 X 4.000 X 0.250
PER AMS-QQ-A-200/8
REF DART SPEC M6061T6A4.000XW250
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: ENGRAVE P/N IN THIS AREA AS SHOWN (NEAR SIDE ONLY) TO MAX
DEPTH OF 0.010 IN 0.18 HIGH LETTERS WITH MIN RADIUS TOOL OF 0.015
- 7) WEIGHT: 1.03 lbs
- 8) SPOT FACE MAX DEPTH OF 0.010 PRIOR TO MARKING

DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D4038 TITLE BRACKET COPYRIGHT © 2005 BY DART AEROSPACE LTD THIS DOCUMENT IS PROPRIETARY AND CONFIDENTIAL. IT IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT	REV.
DRAWN			SHEET 3 OF 4
CHECKED			SCALE
MFG. APPR.			NTS
APPROVED			
DE APPR.			
DATE	11.04.11		





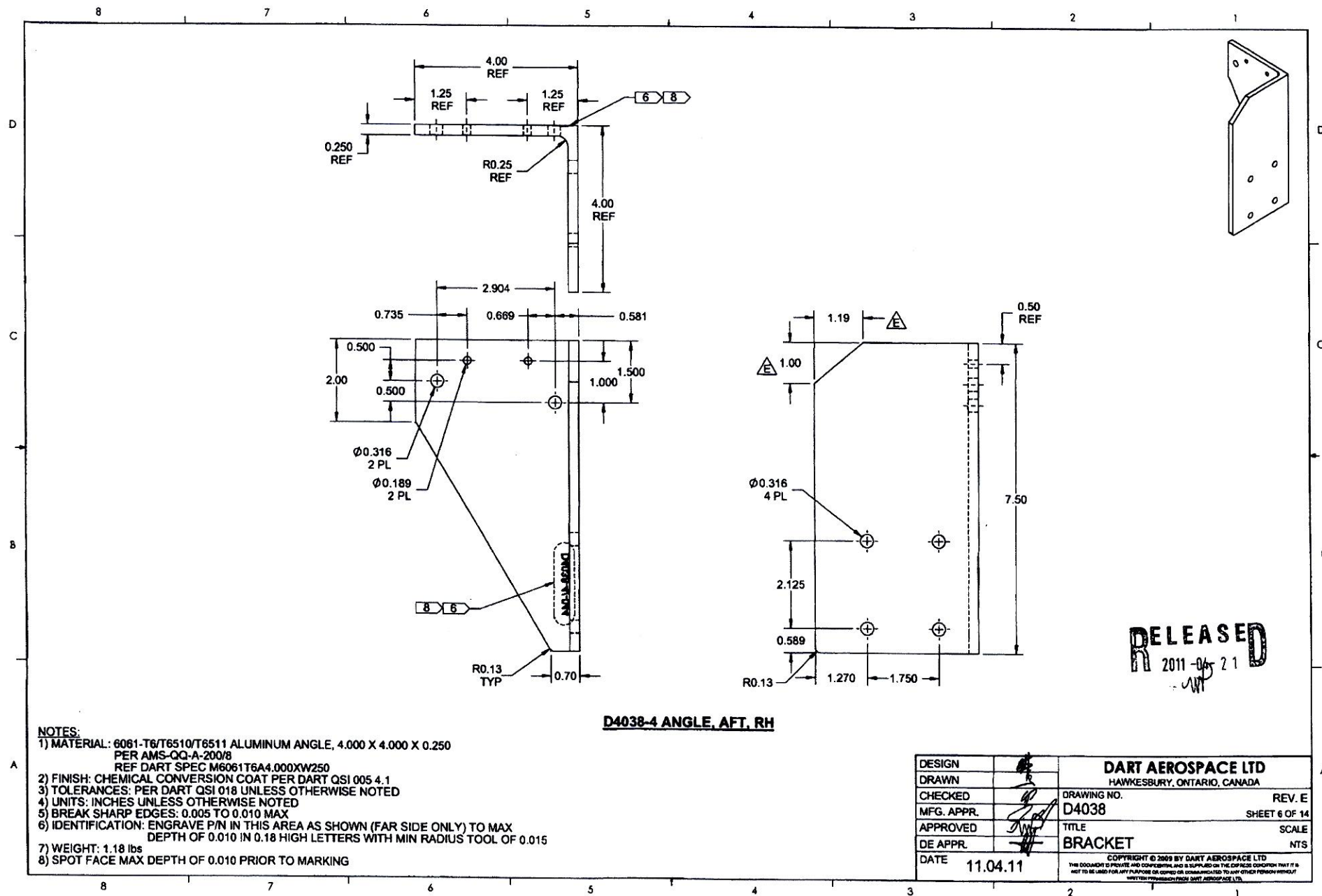
NOTES:

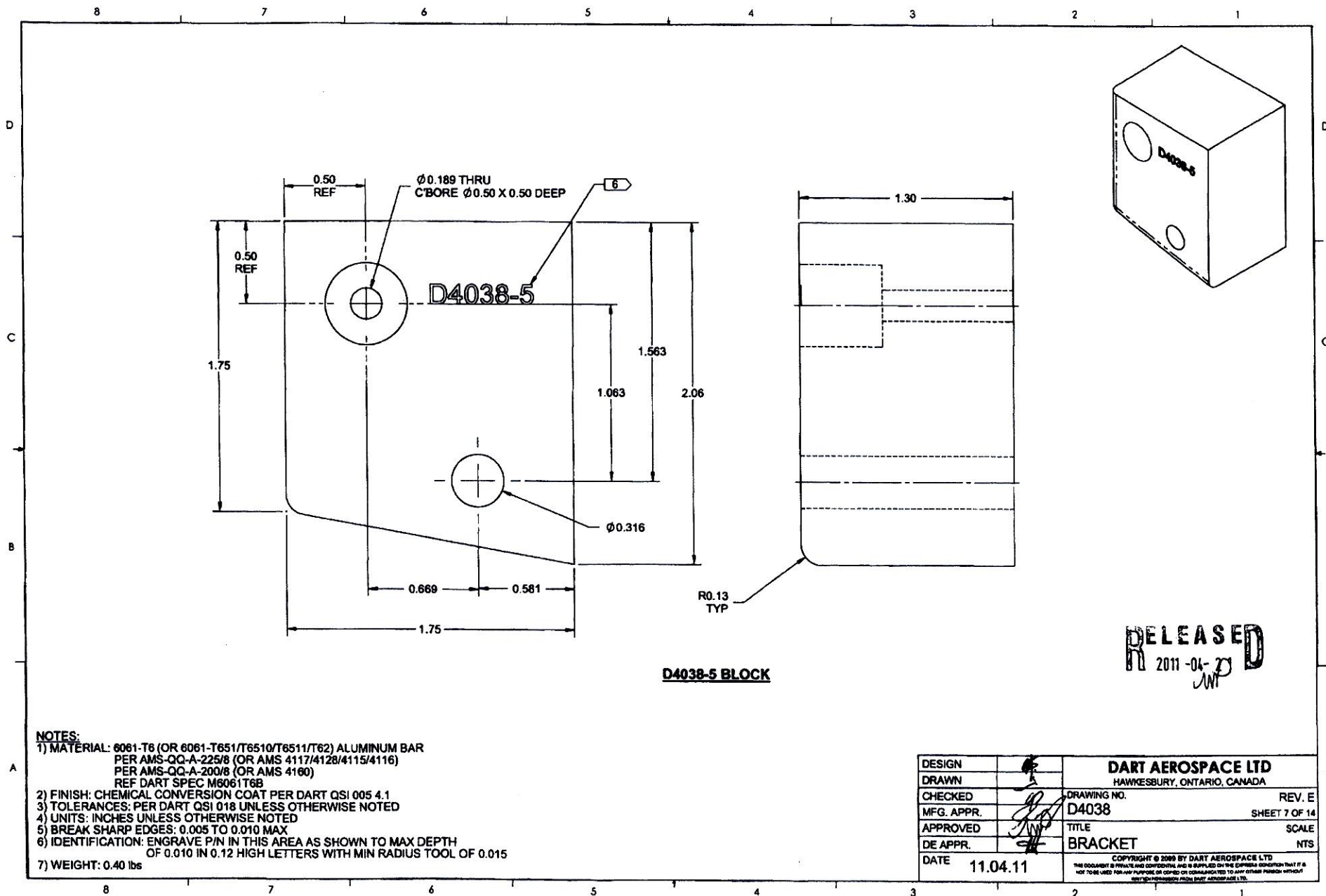
- 1) MATERIAL: 6061-T6/T6510/T6511 ALUMINUM ANGLE, 4.000 X 4.000 X 0.250
PER AMS-QQ-A-200/8
REF DART SPEC M6061T6A4.000XW250
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: ENGRAVE P/N IN THIS AREA AS SHOWN (NEAR SIDE ONLY) TO MAX
DEPTH OF 0.010 IN 0.18 HIGH LETTERS WITH MIN RADIUS TOOL OF 0.015
- 7) WEIGHT: 1.18 lbs
- 8) SPOT FACE MAX DEPTH OF 0.010 PRIOR TO MARKING

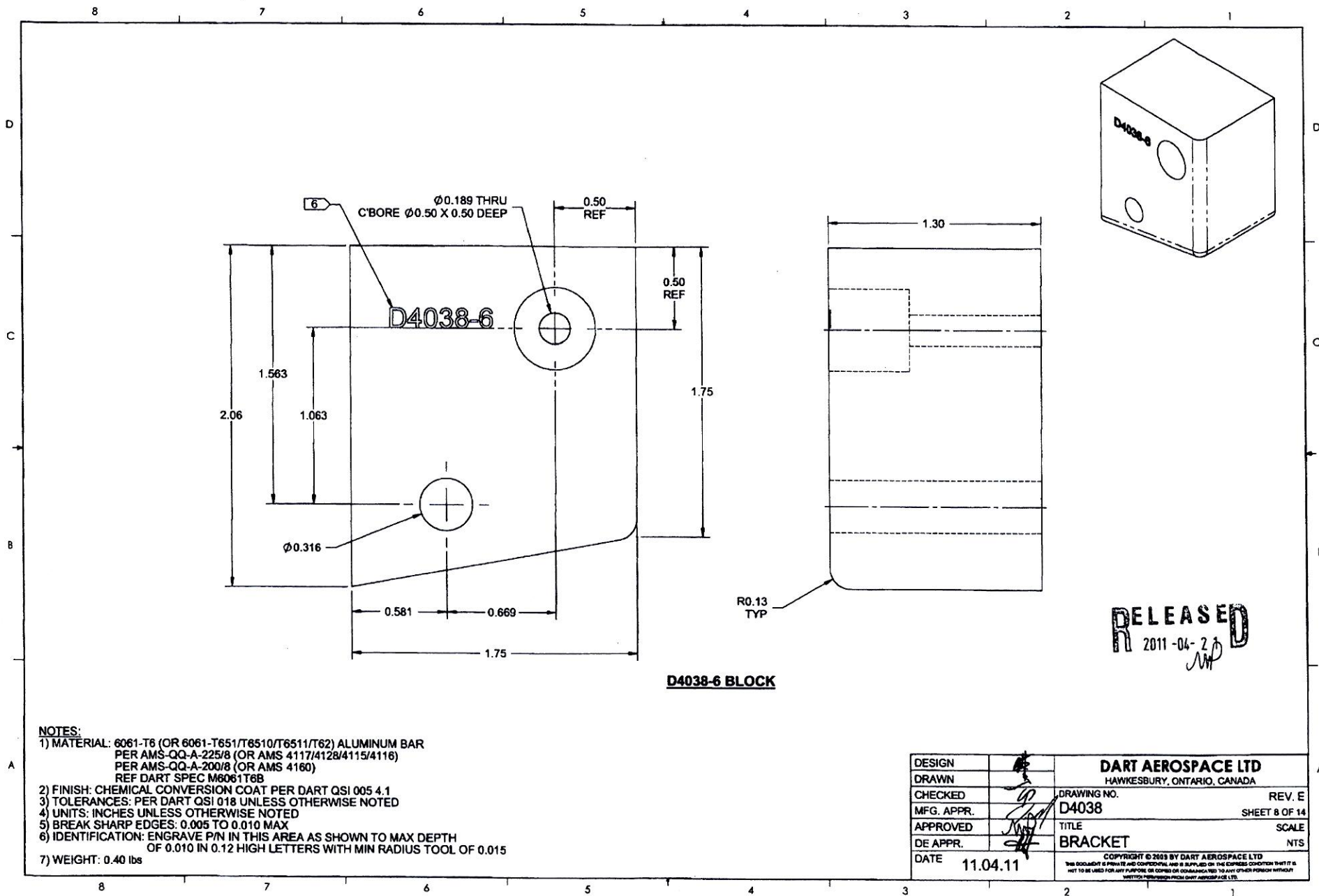
D4038-3 ANGLE, AFT. LH

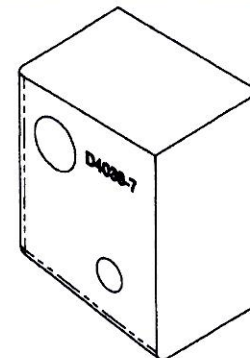
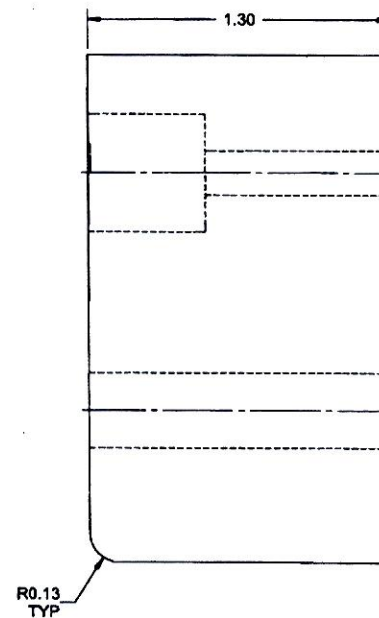
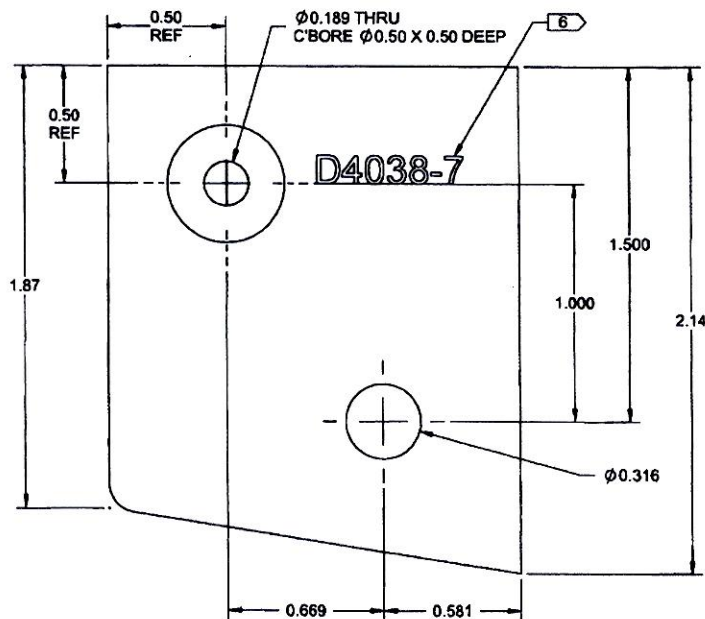
DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D4038	SHEET 5 OF 14
APPROVED		TITLE	SCALE
DE APPR.		BRACKET	NTS
DATE	11.04.11	COPYRIGHT © 2008 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

RELEASED
2011-04-21
JM









D4038-7 BLOCK

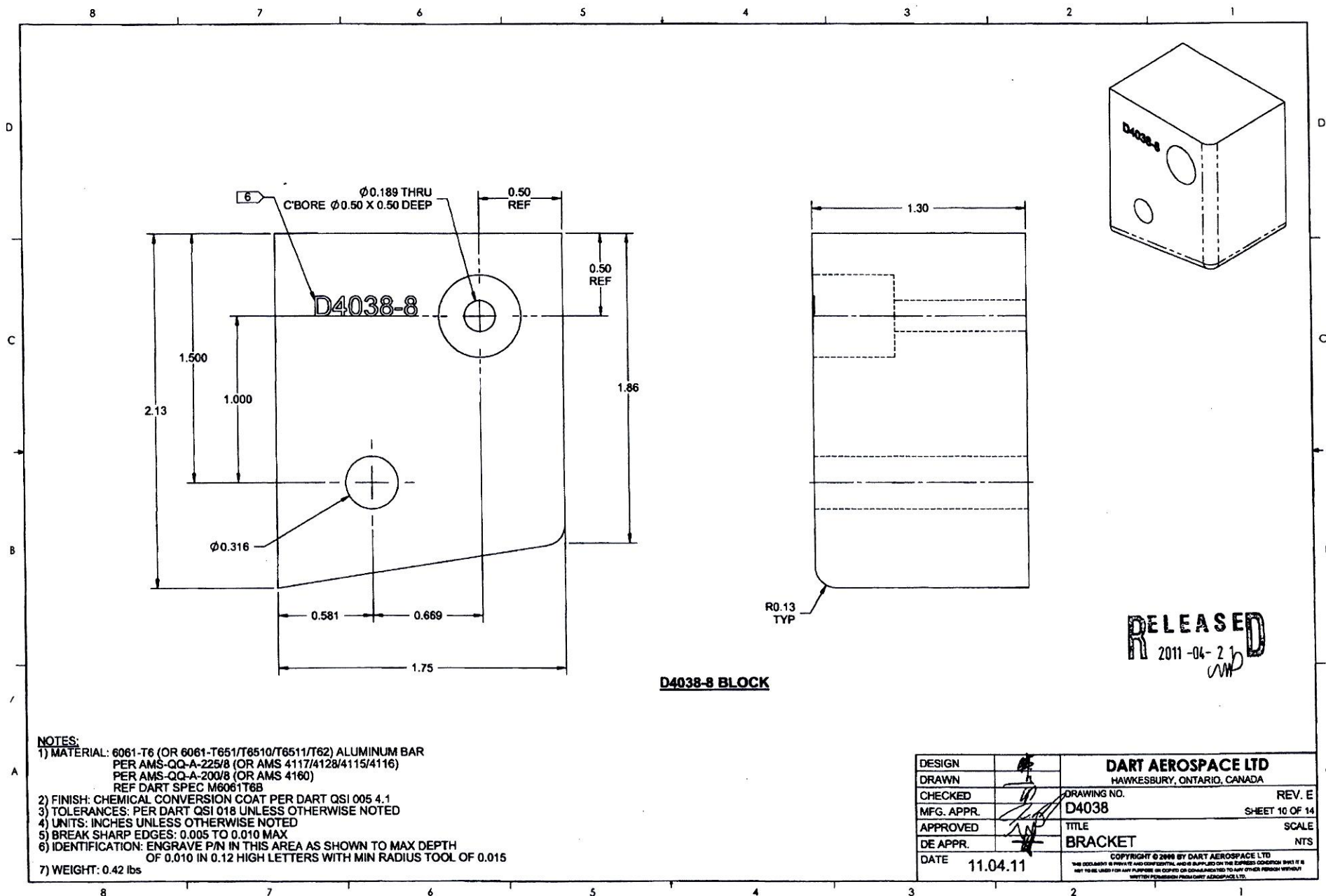
NOTES:

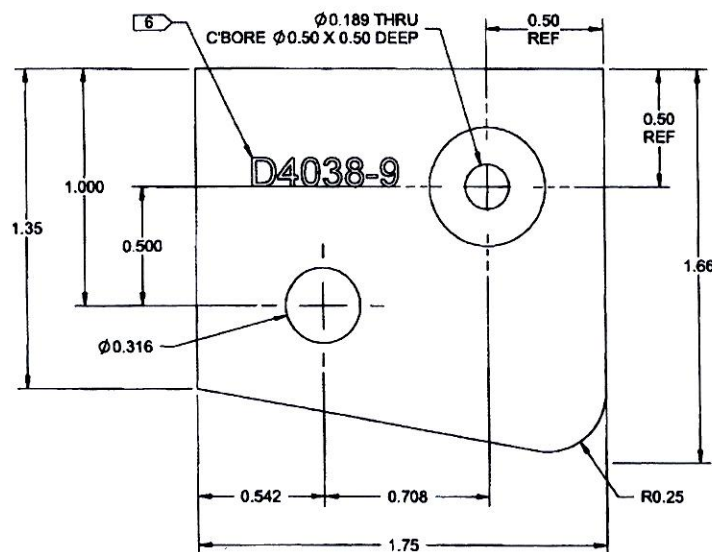
- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) ALUMINUM BAR
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
PER AMS-QQ-A-200/8 (OR AMS 4160)
REF DART SPEC M6061T6B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: ENGRAVE P/N IN THIS AREA AS SHOWN TO MAX DEPTH
OF 0.010 IN 0.12 HIGH LETTERS WITH MIN RADIUS TOOL OF 0.015
- 7) WEIGHT: 0.42 lbs

DESIGN		DART AEROSPACE LTD
DRAWN		HAWKESBURY, ONTARIO, CANADA
CHECKED		DRAWING NO. D4038 REV. E
MFG. APPR.		SHEET 9 OF 14
APPROVED		TITLE BRACKET SCALE NTS
DE APPR.		
DATE	11.04.11	

COPYRIGHT © 2009 BY DART AEROSPACE LTD
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS
NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT
WRITTEN PERMISSION FROM DART AEROSPACE LTD.

RELEASED
2011-04-21
md

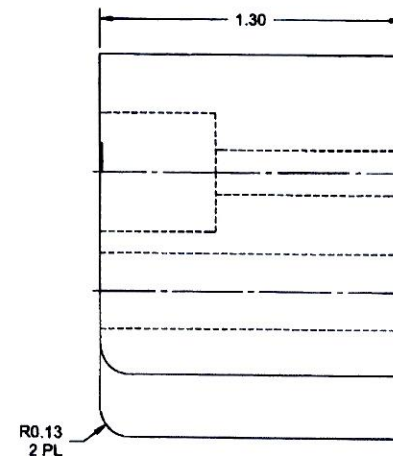
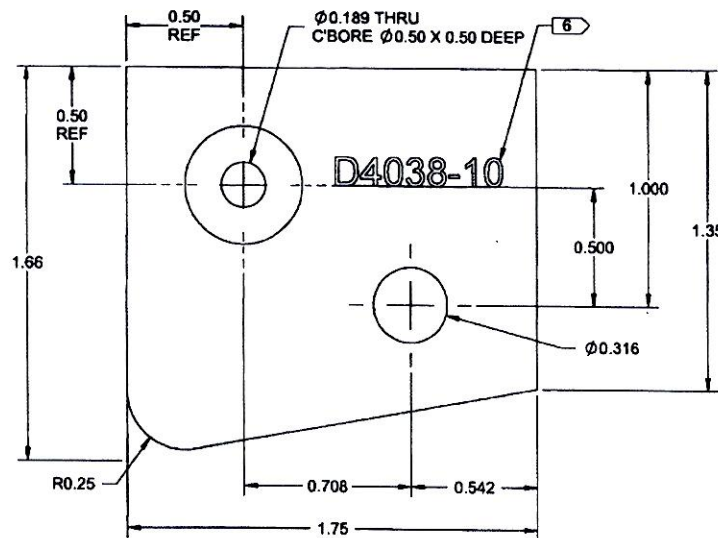
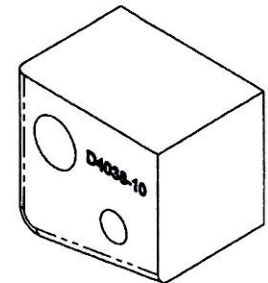




RELEASE
2011-04-21

7) WEIGHT: 0.31 lbs

DESIGN			DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN			DRAWING NO.	REV.
CHECKED			D4038	SHEET 11 OF 11
MFG. APPR.			TITLE	SCALE
APPROVED			BRACKET	NTS
DE APPR.			COPYRIGHT © 2020 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED TO THE USER UNDER A LICENSE TO USE IT FOR THE PURPOSES OF THE PROJECT FOR WHICH IT WAS OBTAINED. IT IS NOT TO BE USED FOR ANY PURPOSES OR ON BEHALF OF ANY OTHER PARTY WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.	
DATE	11.04.11			



D4038-10 BLOCK

RELEASED
2011-04-28
MP

NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) ALUMINUM BAR
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4118)
PER AMS-QQ-A-200/8 (OR AMS 4160)
REF DART SPEC M6061T6B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: ENGRAVE P/N IN THIS AREA AS SHOWN TO MAX DEPTH
OF 0.010 IN 0.12 HIGH LETTERS WITH MIN RADIUS TOOL OF 0.015
- 7) WEIGHT: 0.31 lbs

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. D4038	REV. E
MFG. APPR.			SHEET 12 OF 14
APPROVED		TITLE BRACKET	SCALE
DE APPR.			NTS
DATE	11.04.11	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

